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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,524	09/04/2001	Martin Robitaille		2677

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EXAMINER

KOCH, GEORGE R

ART UNIT PAPER NUMBER

1734

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,524

Applicant(s)

ROBITAILLE ET AL.

Examiner

George R. Koch III

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/15/2004 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 36, 39, and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The application as originally filed makes no reference that the communication means includes infrared signals, or that the edge position measuring system is a motion sensor, or an infrared system.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 19, 30, 31, 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartman (US 5,759,339).

Hartman discloses (see, for example, Figure 1, 5, and the claims) an apparatus for the positioning of a dispenser for laminating an endless ribbon in relationship to a moving web having generally parallel edges defining a web width, the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim, the apparatus comprising a traversing mechanism (see columns 3-4, items 30) extending transversally of said web width and couple to a drive means, the traversing mechanism defining a traversing path of a first predetermined length, having a direction and which provides a movement means along said traversing path, a guide rail (item 25) of second predetermined length, extending transversally of the web width and positioned in a parallel direction to the direction of the traversing path, a plurality of guide arms (items 40), each guide arm having a dispensing means (item 52) for dispensing the ribbon and a transversal position with respect to the traversing path, and a locking means (item 50), each guide arm being movably supported on the guide

rail and being either fixedly connected to the movement means or being fixedly connected to the apparatus by the locking means.

Such a structure as in Hartman is capable of having the first predetermined length and the second predetermined length transversely extend beyond the web width, the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim, assuming the applicant uses a relatively narrow moving web.

As to claim 30, Hartman discloses that each guide arm comprises a bearing support which slides on a series of bearing ((item 48) on said guide rail along the direction of the traversing path.

As to claim 31, Hartman discloses that the dispensing means are guide pulleys (items 52).

As to claim 41, a structure such as in Hartman is capable of having the first predetermined length and the second predetermined length transversely extend beyond the web width, assuming the applicant uses a relatively narrow moving web. Therefore, the guide arms are capable of being moved away from the web width such that the guide arms can be thread up with the ribbon outside the web width, the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim.

As to claim 43, the apparatus is capable of being moved in such a manner.

6. Claims 19-23, 30, 31, 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Persson (US Patent 4,995,937)

Hartman discloses (see, for example, Figures 1, 2, 7 and 8) an apparatus for the positioning of a dispenser for laminating an endless ribbon in relationship to a moving web having generally parallel edges defining a web width, the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim, the apparatus comprising a traversing mechanism (item 122 and related structure) extending transversally of said web width and couple to a drive means, the traversing mechanism defining a traversing path of a first predetermined length, having a direction and which provides a movement means along said traversing path, a guide rail (item 14) of second predetermined length, extending transversally of the web width and positioned in a parallel direction to the direction of the traversing path, a plurality of guide arms (items 19), each guide arm having a dispensing means (item 38) for dispensing the ribbon and a transversal position with respect to the traversing path, and a locking means (item 31, 33), each guide arm being movably supported on the guide rail and being either fixedly connected to the movement means or being fixedly connected to the apparatus by the locking means.

Such a structure as in Persson is capable of having the first predetermined length and the second predetermined length transversely extend beyond the web width, the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim, assuming the applicant uses a relatively narrow moving web.

As to claim 20, Persson discloses that the traversing mechanism is a lead screw (item 122).

As to claim 21, Persson discloses that the movements means is a screwthreaded bore, i.e., a lead nut (see column 7, line 61 to column 8, line 29).

As to claim 22, Persson discloses that the drive means is a motor which rotates the lead screw (column 8, lines 11-13).

As to claim 23, Persson discloses that the guide arms fixedly connect to the lead nut via manual locking means and move along the traversing path as the lead screw is rotated by the motor.

As to claim 30, Persson discloses that each guide arm comprises a bearing support (98) which slides on a series of bearing (item 111) on said guide rail along the direction of the traversing path.

As to claim 31, Persson discloses that the dispensing means are guide pulleys (items 38).

As to claim 41, a structure such as in Hartman is capable of having the first predetermined length and the second predetermined length transversely extend beyond the web width, assuming the applicant uses a relatively narrow moving web. Therefore, the guide arms are capable of being moved away from the web width such that the guide arms can be thread up with the ribbon outside the web width, the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim.

As to claim 43, the apparatus is capable of being moved in such a manner.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 23-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Persson (US Patent 4,995,937) as applied to claims 19-23 above, and further in view of Hartman (US Patent 5,759,339).

As to claim 23 and 24, Persson does not disclose that the locking means are pneumatic driving cylinders mounted on each said guide arm, or that the guide arms directly connect to the lead screw. Persson does disclose moving the arms along the traversing path by utilizing a motor to rotate the lead screw. Persson, of course, discloses using a lead screw as the traversing means (item 122)

Hartman, while using different, but equivalent traversing means (a drive belt), does disclose that the guide arms utilize locking means which are pneumatic driving

cylinders (see column 4, lines 30-54) which directly connect the arm to the traversing means. One in the art would appreciate that pneumatic driving cylinders, along with the remote means, would provide the capability to accurately and quickly unlock and reposition the arms during operation from a remote location and could be used with the lead screw of Persson with negligible modification well within the skill of one in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the pneumatic cylinder locking means of Hartman and its associated remote means in order to acquire the capability to accurately and quickly unlock and reposition the arms during or between operation from a remote location, thus providing operator safety.

As to claim 25, Hartman as incorporated discloses that each pneumatic driving cylinder fixed connects to the traversing means by pushing against in a generally perpendicular direction with respect to the traversing path. When incorporated into Persson as in claims 23-24 above, the traversing means substructure would be the lead nut.

As to claim 26, Hartman, as incorporated into Persson in claims 23-25 would result in the guide arms being connected to the apparatus via the locking means and maintaining their position on the traversing path as the lead screw is rotated by the motor.

As to claim 27, see the rejection of claim 24 above.

As to claim 28, see the rejection of claim 25 above.

As to claim 29, see the rejection of claims 23-28 above.

10. Claims 32-34, 36-39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Hartman, as applied to claims 19, 30, 31 and 41 above or Persson in view of Hartman as applied to claims 23-29 above, and further in view of Shea (US Patent Publication 2002/0170938).

As to claim 32 and 42, Hartman, either alone as applied in claims 19, 30, 31, and 41 or as incorporated in Persson and applied to claims 23-29, discloses traversing mechanism, guide rails, a plurality of guide arms, each guide arm have dispensing means and locking means, each guide arm being movably supported on the guide rail and being either fixedly connected to the movement means or fixed connected to the apparatus by said locking means, (see rejections above for these elements) and further discloses a control actuating system remotely controlling the locking means via a communication means and guide position measuring system acquiring said transversal position of each guide arm (see column 5, line 55 to column 6, line 45). The web width is capable of not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim.

Neither Persson or Hartman, or Persson in view of Hartman, as applied above, disclose that the apparatus further comprises an edge position measuring system tracking at least one of said edges of said web and which generates a transversal edge position with respect to the traversing path.

Shea discloses a strip (i.e., ribbon) dispensing apparatus further comprises an edge position measuring system tracking at least one of said edges of said web and

which generates a transversal edge position with respect to the traversing path (see paragraphs 0050 to 0058). Shea discloses that such sensors allow for control of the guide arm positions (see paragraphs 0017-0021, for example) and one in the art would appreciate that such a system would allow for accurate ribbon placement, resulting in a more precise product. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such edge position measuring systems in order to achieve more accurate ribbon placement and acquire a more desirable product.

As to claim 33, Hartman discloses that the control actuating system acquires the traversal position of each guide arm and the transversal edge and remotely adjust via the communication means the transversal position of each guide arm with the locking means (column 5, line 55 to column 6, line 45).

As to claim 34, Hartman discloses that the communication means include electronic signals (see column 6, line 2, the word "current pulse").

As to claim 36, it is taken as well known and conventional to replace the electronic signal means wholly or partially with infrared signal systems. One in the art would immediately recognize that infrared signal systems are wireless, and thus would eliminate the need for running wires (which can potentially tangle or short) as well as making it easier to move the user control display. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized communication means that include infrared signals in order to eliminate the need for wires and eliminate the possibility of tangles or shorts.

As to claim 37, Hartman discloses that each guide arm position measuring system comprises a transducer (item 35) extending along the traversing path and supported by the apparatus, and that each guide arm comprises a magnet (item 56) localized adjacent to the transducer in order to establish the position of the guide arm to the transducer (see column 5, line 55 to column 6, line 45).

As to claim 38, Shea discloses that the edge position measuring apparatus includes sensors 185 and 186 which are formed of optical fibers and monitor laser light. This sensor is taken to be a camera.

Furthermore, as to claim 39, the edge position measuring system is capable of monitoring the web as it is in motion. Therefore, the edge position measuring system is a motion sensor.

11. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman and Shea as applied to claims 32-34 above, or Persson, Hartman and Shea as applied to claims 32-34 above, and further in view of Blase (US Patent 4,962,639).

Both Hartman and Shea, and Persson, Hartman and Shea, as applied to claim 34 above disclose the use of electronic signals. However, the references above do not disclose using an energy chain.

Blase discloses using an energy chain (see columns 1-6, energy chain is equivalent to power supply chain) which holds hoses and cables (see abstract). Blase discloses that the chain allows for an orderly guidance of the cable or hoses (abstract). One in the art would immediately appreciate that language "orderly guidance" refers to,

among other benefits, the fact that such chains prevent the hose tubes from interfering with the operation of other elements. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such energy (or power supply) chains in order to provide orderly guidance of the pneumatic hoses.

12. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman and Shea as applied to claim 32 above, or Persson, Hartman and Shea as applied to claim 32 above, and further in view Duecker (US 5,087,313)

If the sensors of Shea are not taken to be cameras, Duecker discloses that a line scanning camera (see. For example, claim 3, and specification, items 25, 26) is used to monitor the edge of the web. One in the art would appreciate that Duecker's system is a functional equivalent of the system in Shea and that Duecker allows for accurate identification of the edge of the web. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the camera of Duecker in order to acquire accurate identification of the edge of the web.

Furthermore, as to claim 39, the line scanning camera of Duecker is capable of monitoring the web as it is in motion. Therefore, the edge position measuring system is a motion sensor.

13. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman and Shea as applied to claim 32 above, or Persson, Hartman and Shea as applied to claim 32 above, and further in view Krayenhagen (US Patent 5,244,518).

The references as applied to claim 32 above do not disclose that the edge positioning measuring system is an infrared system.

Krayenhagen discloses that an infrared system (see column 6, lines 38-49). Krayenhagen discloses that such sensors provide accurate information as to the web edges and center which is used to control work tools. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the camera of Krayenhagen in order to acquire accurate identification of the edge of the web in order to control the work tools (in this case, the guide arms).

Furthermore, as to claim 39, the infrared system of Krayenhagen is capable of monitoring the web as it is in motion. Therefore, the edge position measuring system is a motion sensor.

Response to Arguments

14. Applicant's arguments in the remarks filed 12/9/2003 have been fully considered but they are not persuasive.

15. In response to applicant's argument that the current invention allows for the guide arms to be moved away from the web width such that the guide arms can be thread up with the ribbon outside the web width, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative

difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case a structure such as in Hartman or Persson is capable of having the first predetermined length and the second predetermined length transversely extend beyond the web width, assuming the applicant uses a relatively narrow moving web, such that the guide arms to be moved away from the web width such that the guide arms can be thread up with the ribbon outside the web width.

Response to Arguments

16. Applicant's arguments filed 6/15/2004 have been fully considered but they are not persuasive.

17. With regard to applicant's argument as to the 35 USC 112 1st paragraph rejection, these arguments are not persuasive. Applicant needs to show possession and disclosure of the invention at the time of filing. The applicant has not done that. The fact that applicant acknowledges that such structures are well known and conventional from a 35 USC 103(a) standpoint does not negate the requirements from a 35 USC 112 1st paragraph standpoint.

18. In response to applicant's argument the prior art does not anticipate or disclose "that the web width not exceeding a certain maximum width which is undefined relative to apparatus structure in the claim," a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the

prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, this limitation is an intended use limitation, and applicant does not show this limitation results in a patentably distinguishable structure.

19. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., That the spindle screw-threaded bore can move any one of the tape applicators *per se* in relation to the beam or carrier arrangement) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

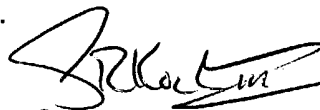
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. . The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George R. Koch III
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GRK
11/19/2004